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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,040	07/28/2003	Robert N. Mayo	200208395	7387

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EXAMINER	
FRINK, JOHN MOORE	
ART UNIT	PAPER NUMBER
2142	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/629,040	MAYO ET AL.	
	Examiner	Art Unit	
	John M. Frink	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/23/2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 13, 15, 16, 17, 28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman et al. (US 2001/0049717 A1).

3. Regarding claims 1 and 16, Freeman et al. disclose the information system of claim 1 and the method of claim 16, comprising a set of access subsystems each for use in accessing a persistent store in the information system in response to a client request from a client of the information system (Figs. 2A, 2B, 7B, 8A, 8B); transaction director that determines which of the access subsystems is to handle the client request in response to a set of client side information generated by the client, where Freeman et al.'s source subsystem corresponds to said client, destination subsystem corresponds to said access subsystem, and service locator corresponding to said transaction director (Figs. 7B and 8A, [0255-0260,0275-0277]).

4. Regarding claims 2 and 17, Freeman et al. further disclose where the client-side information includes a set of information pertaining to a the client (Fig. 7B, item 722; [0252-0253]).

5. Regarding claims 13 and 28, Freeman et al. further disclose where the client-side information includes an indication of a location of the client ([0276-0278]).

6. Regarding claims 15 and 30, Freeman et al. further disclose where the transaction director assigns the client request to the access subsystems in response to the client-side information and a rank associated with each access subsystem ([0192 - 0194]).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 10 and 25 rejected under 35 U.S.C. 102(b) as anticipated by Freeman et al. or, in the alternative, under 35 U.S.C. 103(a) as obvious over Freeman et al. in view of Toga (5,987,504).

Regarding claims 10 and 25, Freeman et al. further disclose where the client-side information includes a set of samples from sensors in an environment the client, where sensors in Freeman et al's disclosure detect and insert into said client's request said client's UID (Fig. 7B, [0276-0278]).

Alternatively, Toga et al. discloses transmitting information, including User-Agent information along with a client request (Fig. 4), where said User-Agent information relates to the client, is determined, or rather, sensed by said client, and thus is inherently gathered by sensors in said client's environment (Toga et al., col. 3 lines 58 – 60), where said sensors include the CPU, memory, hard disks, etc. working in conjunction to determine/sense the client's User-Agent.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman et al. with that of Toga in order to provide the most amount of information possible about the requesting party to the party that will fulfill said request in order to ensure said request fulfillment was maximally compatible and efficient.

9. Claims 3, 7, 11, 12, 18, 22, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al. in view of Toga.

10. Regarding claims 3 and 18, Freeman et al. disclose the system and method according to claims 1 and 16.

Freeman et al. do not disclose where the client-side information includes a set of information pertaining to a user.

Toga discloses where the client-side information includes a set of information pertaining to a user (where said information is represented by said user's e-mail address; col. 3 lines 14 – 17).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman et al. with that of Toga in order to enable alternative modes of response to said request, such as via e-mail. Additional, said e-mail address provides additional information about said requesting client. It is beneficial to provide the most amount of information possible about the requesting client in order to ensure the response to said request is maximally compatible and efficient.

11. Regarding claims 7 and 22, Freeman et al. in view of Toga further disclose where the client-side information includes a hint on where a set of data targeted by the client

request may be stored. Specifically, Toga discloses an HTTP client request message, which includes a file path (item 212 of Fig. 4) corresponding to the file requested. The file path directly relates to the location of where the data pertaining to the request is stored.

12. Regarding claims 11 and 26, Freeman et al. in view of Toga further disclose where the client-side information includes an indication of hardware capabilities of the client. Specifically Toga discloses displaying which operating system and web browser the client is using through disclosing the client's user-agent, which inherently discloses the client's operating system along with the client's web browser as a part of the user-agent (Fig. 4). Operating systems and web browsers both have basic hardware requirements that determine on which machines they will run, and thus being able to tell the operating system and web browser running on a particular machine gives an indication of that machine's hardware capabilities.

13. Regarding claims 12 and 27, Freeman et al. in view of Toga further disclose where the client-side information includes an indication of a type of application that generated the client request. Specifically Toga discloses displaying which web browser, web page parser or other device capable of generating an HTTP request the client is using which is inherently disclosed in the client's user-agent (Fig. 4).

14. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al. in view of Baumann et al. (US 2002/0099844 A1).

Freemen et al. show the system and method according to claims 1 and 16.

Freemen et al. do not show where the client-side information includes information pertaining to a history of prior interactions with the information system.

Baumann et al. show the client-side information includes information pertaining to a history of prior interactions with the information system ([0061]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman et al. with that of Baumann et al. in order to be able to predict future client behavior based on past patterns and thus better serve client requests.

15. Claims 5, 14 and 20 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al. in view of Amon et al. (US 7,110,962 B2).

16. Regarding claims 5 and 20, Freemen al. show the system and method according to claims 1 and 16.

Freemen et al. do not show where the client-side information includes a potential frequency of client requests from the client.

Amon et al. show where the client-side information includes a potential frequency of client requests from the client(col. 2 lines 37-43, col. 3 lines 32-50).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman et al. with that of Amon et al. in order to in order to be able to predict future client behavior based on past client requests (in this case, how frequently the client requests information) and thus better serve client requests as well as better allocate resources for fulfilling said requests.

17. Claims 14 and 29, Freemen et al. in view of Amon et al. further show where includes a cookie that is stored in a client that originated the client request (col. 3 lines 36-43).

18. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al. in view of Laurie et al. (Apache: The Definitive Guide, 2nd Edition).

Freemen al. show the system and method according to claims 1 and 16.

Freemen et al. do not show where thee client-side information includes a priority of a set of data targeted by the client request.

Laurie et al. show where thee client-side information includes a priority of a set of data targeted by the client request (Section 6.4, specifically the discussion involving understanding the use of quality score numbers).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman et al. with that of Laurie et al. in order to provide for a method for clients to specify how important their request is and what elements about their request are the most important so that all requests could be served in a manner that gave the most urgent requests attention the quickest, as well as ensuring that elements within a single request were delivered according to the clients preferences.

19. Claims 8, 9, 23 and 24 are rejected rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al. in view of W3C.org (http://web.archive.org/web/19970606013505/http://www.w3.org/Protocols/HTTP/HTRQ_Headers.html; June 6, 1997).

20. Regarding claims 8 and 23, Freemen al. show the system and method according to claims 1 and 16.

Freemen et al. do not show where the client-side information includes a cost indication with the client request.

W3.org discloses where said client-side information includes a cost indication with the client request, specifically by the use of 'type parameters' that allow the server to economise with regards to transmission time; higher values for type parameters such as 'dpi' result in higher costs of transmission http://web.archive.org/web/19970606013505/http://www.w3.org/Protocols/HTTP/HTRQ_Headers.html, Accept section).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Freeman et al. with that of W3.org in order to save network resources when possible, allowing for faster content delivery to said client and allowing more client requests to be managed.

21. Regarding claims 9 and 24, Freeman et al. in view of W3.org further disclose where said client-side information includes a computational intensity associated with the client request, specifically by the use of 'type parameters' that allow the server to economise with regards to computational intensity. The specific example of sending black and white images rather than color images in order to lower computational intensity is given; larger color images require more computational intensity to transmit on the server end and to display or convert on the client end

(http://web.archive.org/web/19970606013505/http://www.w3.org/Protocols/HTTP/HTRQ_Headers.html, Accept section).

Response to Arguments

22. With regard to the applicants' remarks filed on 2/23/2007:

Regarding the rejection of claims 8, 9, 23 and 24 under 35 U.S.C 112, first paragraph, the arguments have been considered and are deemed persuasive.

Regarding the rejection of the claims 1, 3-5, 14, 16, 18-20 and 29 in view of Jaye, the arguments have been considered and are deemed persuasive.

Regarding the rejection of the claims 1-3, 7, 11, 12, 16-18, 22, 26 and 27 in view of Toga, the arguments have been considered and are deemed persuasive.

Regarding the rejection of the claims 1, 2, 6, 12, 13, 16, 17, 21, 27 and 28 in view of Laurie, the arguments have been considered and are deemed persuasive.

Regarding the rejection of the claims 1, 6, 14, 16, 21, and 29 in view of Masters, the arguments have been considered and are deemed persuasive.

Regarding the rejection of the claims 1, 6, 14, 16, 21, and 29 in view of Masters, the arguments have been considered and are deemed persuasive.

Regarding the rejection of the claims 1, 8, 9, 16 and 23 in view of w3.org, the arguments have been considered and are deemed persuasive.

Regarding the rejection of the claims 1, 2, 7, 10-13, 16, 17, 22 and 25 –28 in view of Gourley and Totty, the arguments have been considered and are deemed persuasive.

Therefore, said rejections have been withdrawn. However, upon further consideration, new grounds of rejection are made in view of the references identified above.

23. With further regard to the applicants' remarks filed on 2/23/2007:

Regarding the rejection of the claims 1, 15, 16 and 30 in view of Freemen et al., Applicant suggests that Freemen et al. do not disclose where a transaction director directs requests based on client-side information, where said client said information is generated by the client. However, Freemen et al. disclose how client requests are directed based on a request bit, client UID other information in the Event Header and in Event Data, among other information which is generated by the client (Fig. 7A and 7B) and sent in a message to request a target server (Figs. 8A and 8B, [0255-0260,0275-0277]). Thus, Applicant's arguments can not be held as persuasive regarding patentability.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

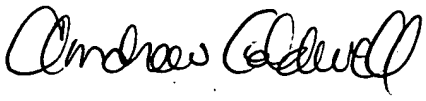
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Frink whose telephone number is (571) 272-9686. The examiner can normally be reached on M-F 7:30AM - 5:00PM EST; off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



ANDREW CALDWELL
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